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eCASPAR Usability Study
Final Report

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TABLE OF CONTENTS

INTRODUCTION

Background

eCASPAR is a new online service that is intended to help healthcare rehabilitation, aging services, and home building professionals assess client needs, identify problems with daily activities in the home, individualize home modification strategies for each client, manage client records and maintain a personal database. The site, developed by the Extended Home Living Services (EHLS), is designed to provide support to professionals assisting with the growing needs of aging adults desiring to remain independent in their homes for as long as possible. The site offers public pages describing the resources available to those who become members. The targeted professionals can become members of eCASPAR and can benefit from the site's online services.

Through a login process users have access to products used in home modifications, an area to store and manage client data and client communications, and a proposed area for automating the CASPAR client assessment process. Users can search for home modification strategies and solutions, store and retrieve products that are often used for their clients, and enter and retrieve client information. Individuals, companies, or organizations will be able to purchase membership in eCASPAR.

Purpose

The purpose of the usability study is to determine the degree to which the design, content, navigation, search, assessment, and client management features meet the needs of potential *eCASPAR* users. Website usability, which can be defined as creating an *effective*, *efficient*, and *satisfying* site, integrates both the user (i.e. functional abilities, background, knowledge, etc.) and the environment (design, features, terms, and information of the site). The study is intended to identify specific structures, features, terms, and content that impact the overall usability of this site for the target population.

The study was to accomplish the following:

Assess the user's understanding of the purpose of eCASPAR

- Review the homepage to determine initial user perspective
- Review the public links to understand the benefits of an eCASPAR membership

Assess the ability to search the eCASPAR product database to find home modification strategies and solutions

- Solve home modification problem with Solutions by Keyword
- Solve home modification problem with Solutions by Problem
- Save products to and access products from "MyDatabase"

Assess the ability to use the client tracking features

- Enter client information using the "MyClients" feature
- Access and edit client information in MyClients

Review aspects of the Reports and Assessment features

- Review user's desires about tools for client management
- Evaluate a design of the CASPAR assessment for online use

METHODS

Protocol Development

The CATEA researchers initially worked with site developers to prepare the site for initial testing and prepare the study protocol. The study included a task-driven usability process and a survey. The researcher finalized the specific usability tasks, procedures for recruitment, screening, intake and consent, and an honorarium for participation.

The study protocol was designed for implementation in usability lab environment. All study sessions were implemented with a single participant and generally included a facilitator and note taker. Each study session took approximately two hours for each participant. All participants scheduled for the usability lab were observed and videotaped during the study using Morea usability software. During each session, the note taker observed and logged participant comments, any barriers experienced, and areas that were used with ease. Entries to the logs were classified into categories. At the end of each of the study activities, participants answered survey questions about the activity.

At the end of the Phase I study, revisions were made to improve the usability of the site. During Phase II, the study was repeated to evaluate the revisions and ensure that the changes were improvements in usability. In Phase III, the final iteration of the study, the primary sections

of the site were evaluated again and a new area related to client tracking and assessment also was evaluated. Phases I and II were accomplished in a usability lab. Phase III was accomplished in the participants' work or home environments using a telephone or an online conferencing system for communication. These participants were not videotaped, but were audio taped when possible. During each session, the note taker logged participant comments regarding challenges and/or benefits of the site.

Study Sample and Recruitment

Twenty-two subjects were recruited from the target audiences: occupational therapists (OT), physical therapists (PT), residential building contractors and aging specialists. Professional experiences and demographic data were collected from subjects as part of the usability study. Targeted were people who had home modification work or educational experience and basic computer literacy. Study participants were recruited from the metropolitan Atlanta area and nationally. Local participants experienced the study using the usability lab, while participants outside of Atlanta were tested remotely, most in their offices. Of the 22 recruited, 20 participated in the study. Two participants failed to keep their appointments and were not able to be rescheduled.

Phase I – six participants were recruited from Atlanta during November/December 2005. Results from the study were reported and recommendations were made to EHLS in January 2006. Revisions to the site were made during 2006. Unfortunately due to a loss of the EHLS database administrator, the contract evolved into a site revision performed by CATEA staff. CATEA lost the use of the proposed Web designer also during this period. The loss of these key members forced a significant delay in the site revisions. ***Phase II*** – the second iteration of the study was performed during November 2006. Five people evaluated the new version of the website. A few further revisions were made after the second study, including a partial version of the online CASPAR assessment. ***Phase III*** - the third iteration was accomplished in December 2006. Nine people participated in the final test of the site. The recruitment was expanded by testing people remotely. The Result Section provides an overview of the results of the three iterations of this study.

Study Environment

Although the study can be accomplished in many environments, the first two study iterations were accomplished using usability labs on the Georgia Tech campus. The usability lab, though not a "natural" environment, enabled users and the researcher to control potential

confounding variables and provide an equivalent environment across users. The labs were large rooms with a webcam mounted on the computer monitor to capture the user's facial expressions. Nearby the usability lab was an observation area with a large LCD monitor, displaying the user and his/her computer monitor. The participants during the first two study iterations were videotaped and observed during the study. The participants in the final iteration were not observed or videotaped. The participants communicated the path they were taking through the site to the facilitator and note taker. The facilitator would move through the site with the participant by following the same links or entering the same data.

Procedures

The study involved five tasks:

Task 1 Examine the *eCASPAR* homepage. Provide insights.

Task 2 Examine the links to the public content

Task 3 Login to the membership area.

Task 4 Examine User Services > Home Assessment

- Can users find a specific Solutions by Problem
- Can users find a specific Solutions by Keyword
- What benefits/preferences/difficulties were found via Problem or Keyword
- Can user add the solution to *MyDatabase*

Task 5 Add client information to *MyClients* through the "saving" of the Home Assessment

- Can users save, retrieve and add to the client file

Task 5 *Revised*: Add client and home barrier information to MyAssessments

- Can users complete parts of the online CASPAR

The protocol was modified slightly for the second study iteration. The MyDatabase was changed to MyProducts to address some confusion experienced by study participants. Though some of the specific functions and structure changed, the overall purpose of the tasks did not change. The procedures of the third study iteration were altered further. Task 2 was revised to include a review of the online demonstrations of the Solutions by Problem and Solutions by Keyword. The demonstrations were intended to evaluate the need for and potential features of a demonstration of the processes available in the membership area of the site. CATEA personnel created the demonstration using Camtasia, a software designed to create demonstrations and tutorials.

Task 5 was revised to include aspects of the client assessment and management system. Aspects of these features were created by the CATEA team and were evaluated to further assist EHLS with user preferences. Most of the interface of the online assessment was created by CATEA, which is the automated version of CASPAR (Comprehensive Assessment and Solutions Process for Aging Residents). The interface or front-end design will be provided to EHLS; however most of the backend – fields and data tables created in the database – was not completed. Therefore data cannot be stored in or rendered from the database in most of the client assessment and management system areas. Creating the client assessment and management systems were not a part of the agreement with EHLS. However CATEA staff attempted to provide the most comprehensive usability evaluation possible.

RESULTS

Data Collection

Usability was measured by participant feedback and observed task performance. Subjective feedback was obtained during and after each study task. While the participants worked through the study tasks, they were asked to talk out loud about their thoughts and processes. As the participants talked through the tasks, the note taker captured important comments, facial expressions, paths taken, challenges experienced, etc. The note taker used Morae, a computer-logging program that was synchronized to the video capture, enabling the researchers to use the log's time codes to review sections of the videotape. At the end of each task, subjects were asked to complete a short questionnaire regarding site usability.

Study Participants

Fifty-five percent of 20 participants classified themselves as contractors/remodelers, while 40% selected aging specialist. Just 25% of participants were occupational therapists. It is important to note that participants could select more than one discipline. Most participants (55%) were between 50 and 59 years of age. Though the number of home assessment the participants performed in the past year varied broadly, 42% performed more than 10 in the past year. To further document experience level, 50% had been in practice for more than 10 years. Just over half (55%) had college or graduate degrees, while 40% had "some college."

Usability Results – Phase I

The first phase collected data from six users. As noted previously, each participant evaluated the website in a usability lab on the Georgia Tech campus. The process was videotaped; notes were taken using the Morea usability software which provided notes linked to the related occurrence on the videotape. Each participant completed all five tasks noted in the Methods Section.

Homepage Design

The initial page of a website must convey the purpose of and available content on the site. The page should welcome the user and provide the structure of how the user will navigate the site. The initial reviews of the eCASPAR homepage were positive for all participants. They found the site's visual layout and navigation understandable and thought the site would provide useful information for them. The target audience for the site was unclear. Participants did not know whether the site provided information on home modifications for people who are aging or people with disabilities. They also were unclear about the difference between "CASPAR" and "eCASPAR" or about the reference to EHLS.

Original Homepage Design

Navigation

The public pages, those accessible without logging in, were easy to navigate. Users could get to each of the links with no difficulties. The site design included a box on the left of the screen for navigating the public areas of the site. There were navigation links included in the header of the page to enable the user to get "Home," "About Us," and "Contact Us."

Left Navigation

The third area of navigation was designed for the membership area of site, which was available once a user logged into the site. The membership navigation page was called "User Services Home" and provided access to the search features, client tracking features, and personalized product database. Participants found two primary challenges in the design of this navigation. First, they arrived at the "User Services Home" passively after logging in. Because they didn't select this page, participants generally did not notice the page's name. Once they left

user services home, they were unable to return there. Though there was a link to user services home in the header, users did not know to select it. Given the navigation was contained on this page, participants had to return there in order to continue searching areas of the site. The navigation choices did not follow the user throughout their selection process. Users also did not understand the structure of the User Services Home area. The left half of the page contained navigation to help users find solutions under "eCASPAR," basically the two search features. The right half of the page contained navigation to help users save and retrieve client and product data under "MyCASPAR."

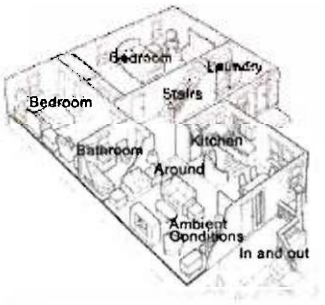
User Services Home

Search Features

There were two methods to search for solutions – searching by the problem using a graphic of a generic house and searching by keyword, manufacturer, or both. The keyword search contained a text field for entering a keyword or phrase, a common search method used by many websites. The solution by problem, a unique method, provided a barrier or problem-based search for potential solutions. Offering flexible search alternatives provide users with choice and generally improved usability.

Solutions by Problem

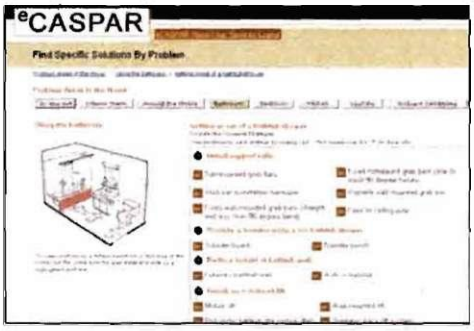
House Graphic



The "Solutions by Problem" search was usable for participants. Most noted that they liked the "house graphic" and found it an easy way to find home barrier solutions. Some users were not initially sure about what they were to do with the graphic, though instructions were provided. Most users did not notice the instructions on how to use the house graphic. Users were able to select the area of the house which led them to potential solutions to resolve home barrier provided in the study scenario. The scenario was related to a person having concerns about getting in and out of the tub. The bathroom graphic had 14 "hot" areas or areas that could be selected as potential barriers. The number links reflected and the often very close proximity of each link was a bit difficult for users. Though the scenario described a barrier getting in an out of the tub, some users selected solutions related to lowering to and rising from the tub. Users also found

the text associated with typical house barriers and potential strategies was a bit too long and difficult to scan. Users felt they would be able to scan the text more readily if it had been bulleted.

Participants found the page providing strategies a bit confusing. The page provided a header for each type of strategy, for example "install support rails" or "install and overhead lift." Beneath each header was a list of potential solutions such as "tub mounted grab bars" that were designed as links to take the user to further details. The page contained a number of potential solutions that made for a bit of a cluttered look. The "Go" buttons, intended to communicate to users that additional information was available, were a bit distracting and were not lined up vertically. However, users did understand they were to select "go" if they wanted more detailed information. If the user rolled over a "?" an explanation window opened to provide support. The pop-up window generally contained several lines of text and covered the regular text on the strategies page.

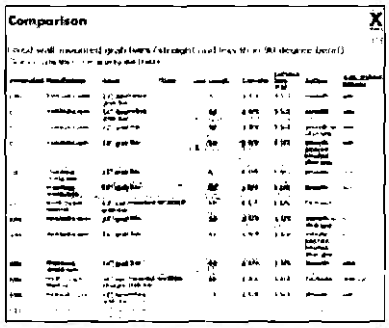


Strategies Page

Product Results

The number of products available on the site pleased users. The product results table included a product picture, key product information, and manufacturer contact information. More details could be obtained when the user selected either the product name link or the product features link, which contained a small subset of product information from the full description.


Product Results Table



Comparison Table

Users liked having the comparison table when doing a "By Problem" search. The comparison table contained a great deal of pertinent information; however, users noted that price was not available. The comparison table was not available to users when doing a "By Keyword" search.

The "MyDatabase" selection box located to the right of each product description in the product results table was often unnoticed by users. The selection of MyDatabase enabled users to save particular product information in their own area of the site. Though a gray box visually highlighted the selection, users did not seem to notice it.

MyDatabase Box on right

Solutions by Keyword

The Solutions by Keyword or manufacturer was not as reliable for users and sometimes failed to provide any relevant information. The keyword search periodically ended in a server error. This error did not occur at all when doing a "By Problem" search, but was frequent when doing a "By Keyword" search.

Server Error

As is common with keyword searches, depending upon the word entered, the user would get varying results. For example the number of product results differed when the user typed "stair_lift" (10 products), "stair_lifts" (1 product), "stairlift" (18 products), "stairlifts" (5 products), "stairs" (25 products) or "stair" (72 products). Products were included in the database with the varying spellings. Though the user may type any possible keyword, it is important that the database be consistent and provide a means of supporting common variations of product types.

When beginning the keyword search, most users did not understand that they could enter a keyword, select a manufacturer from the list, or do both. The site designers provided instructions; but users did generally not read them. Users could have narrowed their search by selecting a type of product and/or selecting a manufacturer. Most did not understand that feature. Users also found the drop-down menu of manufacturers to be too long. The alphabetical listing contained over 100 company names and had duplicate listings of some companies.

Solutions by Keyword Page

MyCASPAR – MyClients

Users were asked to enter and retrieve client information into the MyClients feature. Users had no particular problems entering the client information under the "Add a Client" feature. Users did not understand the purpose of the information at the top of the "Add a Client" page, which asked for "person completing evaluation," "job type," "referral source" and "referral party." These items may have been clear and important to the designers, but were unclear to users. Also contained under the MyClients were features to create/save proposals, reports, correspondence, and photos. These features were listed but were not fully activated for users. Many commented that these features would be a useful way to create and maintain client data and generate and retain client correspondence. These features added value and function to the site above the ability to find home modification strategies and products.

Users suggested that data should populate from one MyClients feature to others. For example information such as name and address, functional limitation, or problem area of house could be automatically entered, if other forms under MyClients feature required the same information. The most frequent concern related to "MyClients" was related to privacy, data security, and HIPPA. Users wanted to know what security procedures would be in place to prevent the access to and misuse of client data. Though there was a plan to ensure data security, this information was not available for users at the time of the usability evalutation. Nearly all participants were very concerned about protecting client data.

MyCASPAR – MyDatabase

Though users had no difficulty saving and retrieving product data, the resulting alphabetical listing really provided little time savings for frequently used products. Expansions of this idea such as being able to connect the product to all clients who were recommended that product may be of more value. This product information with no associated client data was of moderate value to users.

MyDatabase Listing

Site Revisions from Initial Study

After the loss of the EHLS database manager and with having needed revisions based upon the Phase I results, CATEA staff was charged with recreating and revising the site. The site was changed from an ASP (interface) with a Microsoft SQL (database) to a PHP (interface) and postgresSQL (database). CATEA had created a number of websites using the selected

interface and could use some code from other sites once the conversion was made. The "open source" tools also made the selection a fairly cost effective one.

Homepage and Navigation Revision

The homepage was redesigned to include navigation that remained with the user regardless of the location on the site. The public site navigation and member site navigation (area after login) were similar, using the same language and appearing in the same location of the screen. The changes were intended to address the problems associated with the "User Services Home" navigation page that appeared after users logged into the site. The user home services design forced users to return to that page to select from the navigation. The page also was difficult for users to remember the location of given the passive nature that they arrived on the page.

Revised Homepage Design

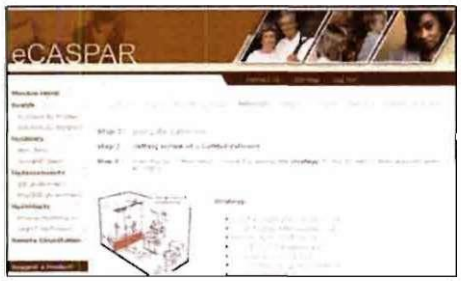
A header and footer were created to appear on all pages of the site. The header included the eCASPAR logo, links to "Contact Us," "Site Map," and "Login/Log out," and a set of pictures to represent the diversity of the people that could need home modification services. The footer included a logo, full name, and contact information for EHLS. The header changes were intended to address the ability of users to login or out from anywhere on the site, better understand the site structure (Site Map), and see a visual representation of the variety of people who might need home modification services. The footer change was to give greater understanding of EHLS and their relationship to eCASPAR.

Revised Footer

Solutions by Problem Revision

Though users found the Solutions by Problem satisfying, there was little supporting text or alternatives to using the graphic. The By Problem search was redesigned to provide links to the right of the house graphic that could be selected instead of the area of the house. The top

of the page also provided the path the user took to get to a particular solution. The path showed their selections in each of the step, allowing the user to see their path and return to previous selections along the path. These revisions allowed for greater accessibility and usability. The long blocks of text that appeared on strategy pages were reduced or eliminated. Most users did not read them, and many found them difficult to scan. Information important to understanding a type of solution was designed to appear on the solution page.



Search Path and Activated Links

Solutions by Keyword - Revision

The data tables were changed to improve the time it took to render search result and the reliability of the results. The error reading that was common when doing the Solutions by Keyword search during the initial test should have been resolved by this change. A variety of "backend" changes were necessary to improve the function of the database. Though these were not in the original statement of work, they were necessary to render reliable results.

Keyword Search Page

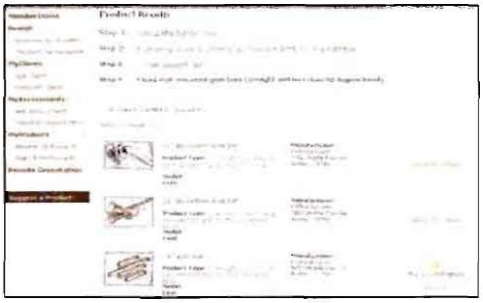
The path the user took to render the product results was designed to appear at the top of the page. The user could see what keyword(s), manufacturer, and/or product type/category he entered. The new By Keyword page was designed to improve the user's understanding of what options he had under this search. Showing the path also was intended to reiterate to the user what selection he made.

Keyword Search Results Page

Product Results - Revision

The product results table was revised to contain the product picture, product name, product type, cost, and manufacturer information. The product page rendered in a default format of alphabetical based on the product name. Newly added was the ability for the user to select the link to a product type in the table and render only that product type's subset in the results list. For example, users could type "stair lifts" in the keyword box. The product results table would show all the types of stair lifts. If the user needed "straight rail stair lifts," he could select that

link in the table and get a table that had only straight rail stair lifts as a product type. If the user wanted more detail about a particular product, he could select the product name link and be taken to a page with the complete product details. The link to select a product from the table for the "MyDatabase" was revised. The link showed "Add to MyProducts" making clearer that an action needed to take place. The "My Products" link was kept to the right of the more critical product information.

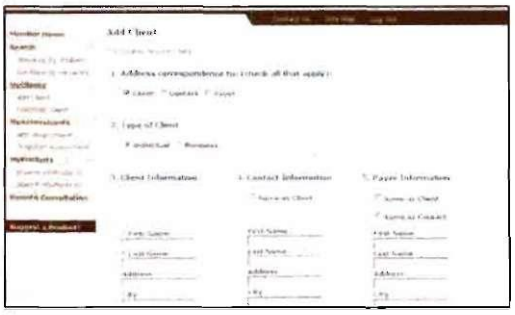


Product Results Table

The CATEA staff also checked the product data fields for spelling errors during this revision. Users found a number of typos in the product information. Though there was no "spell-check" feature connected to the database, a spreadsheet version of the product table was created in order to check the spelling. The "spell-checked" version was put in the place of the original product data prior to the next usability iteration.

MyClient – Revision

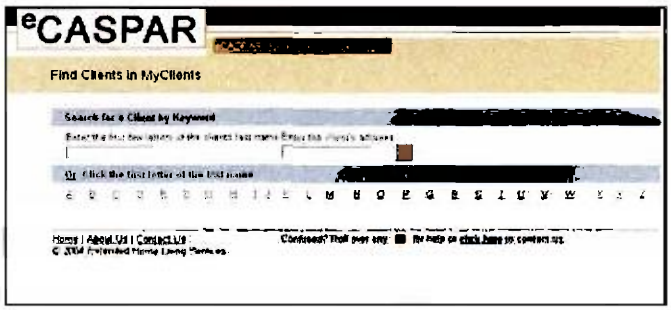
The "Add Client" page was slightly revised. The three columns for client, contact and payer information were aligned with identical content. The revision included the creation of a feature that would allow the user to duplicate information in the contact or payer fields without typing the information again. The "same as client" or same as contact" check box saved the user time in re-typing information previously entered.



MyClient – Add Client

Original Find Client Feature

The "Find Client" feature which allowed the user to search for an existing client by name, address or first letter of the last name was revised slightly. The field to enter the address was changed to request the city the client lives in. The new feature allows the user to search by city to get a



listing of clients living in that city. To search by the first letter of the client's name, the user would select from a link listing of letters in alphabetical order. The new design of the letter selection showed an underline for those letters that had a client(s) listed. If there were no clients under a particular letter, then the user could not select the letter. If client names existed under particular letters, those letters would be underlined and would link the user to the page containing the client list. The search by the entering the last name would render only clients with that last name.

MyDatabase – Revision

MyDatabase was changed to MyProducts. Users found the "MyDatabase" name a bit confusing. The new name was thought to better describe the function of this area of the site. The layout of the "MyProducts" page was revised to look like the product results tables rendered under the search areas. The user could see the picture, product name, product type, product number, cost, and manufacturer information. When in the MyProducts area, instead of saying "Add to MyProducts" the information would show and star and "This is in MyProducts." A link to "Remove" a product from MyProducts appeared below the statement that the product was in MyProducts.

MyProducts Results Page

Usability Results – Phase II

Homepage and Navigation – Results

The second phase evaluated the revised site with five users. Overall, users were found to have improved usability with the new site design. The homepage design and public navigation were understandable to users. They were able to navigate the public and private site with little difficulty. The login process was fluid and the Member Home page reiterated the features and concepts the user was given on the public area. The navigation for the Member Home area appeared to be clear and functional for users.

Search – Results

Though the original design of the Solutions by Problem search was usable, the revised version resulted in improved usability. The creation of links duplicating the areas of the house

graphic provided an alternate means of narrowing strategies and product solutions. Creating the "breadcrumb-like" selection trail allowed users to see their selection path and return to previous selection pages, if needed. The Solutions by Keyword results were not significantly improved in usability. Users still found the By Keyword search less reliable, even though the server error issue had been resolved. Users continued to find the By Problem search easier and more reliable than By Keyword. They also found the list of product types/categories and manufacturers too long to scroll. The CATEA staff was unable to make the necessary changes to the data in these tables. The product types and manufacturers need to be accessed in a means other than drop down menu or need to be grouped to decrease the number of items in the list. The duplication that exists in the data tables also needed to be removed. Because of these continuing problems, the keyword search still lacked some levels of usability.

Product Data – Results

Users found the product detail pages to be very beneficial. The pages contained pictures, measurements, weights, colors, finishes, etc. related to the products. Users were pleased to get the product specifications, but continued to find the lack of cost information a problem. Users understood that the field was there for the eCASPAR site to provide the information, but noticed most price information was not contained in the database.

MyClients and MyProducts

Users found the MyClients and MyProducts areas easy to navigate. They had no difficulty adding and retrieving client or product information. The navigation was changed to allow the user to readily select "Add Client" or "Find/Edit Client." The MyProducts navigation selection allowed the user to "Browse MyProducts" or "Search MyProducts." The "browse" feature provided users with a full list of the products they saved in "MyProducts." The "search" feature provided users with a "keyword" style search capability. They were able to search MyProducts by keyword, product type/category, or manufacturer providing them with a subset of items contained in their MyProducts database.

Revisions for Third Study Iteration

To prepare for the third and final usability assessment, a MyAssessments section of the site was added. Though this was not part of the original statement of work, users really were very interested in how the online assessment feature would work. The CATEA staff also wanted to provide EHLS with direction on how they might create the online version of the

assessment. Simply adding an exact replica of the paper home modification assessment would not achieve the highest level of usability. An interface for navigating the online CASPAR was created to allow users to provide feedback on a means to automate this approximately 25-page assessment document. Though the CATEA staff was unable to complete the full function of connecting the interface and database, a particular route through a problem area was designed to enable a sample evaluation to occur.

An online demonstration of the two search features was added. The Solutions by Problem and Solutions by Keyword demonstrations enabled a user to watch a full demonstration of how these search features work. The purpose was to help users understand how to search for solutions and also to provide potential members a view of the site's capacity. Prior to the creation of the demos, visitors to the site, who were not members, could only imagine how the site worked. The "public" pages described the features, but did not demonstrate them. Using Camtasia, a software package designed to create tutorials and demonstrations, the CATEA team captured screen views of the site while using the search features. The CATEA team then recorded the voiceover explanation. The audio and video were combined and a link to each demonstration was accessed from both the homepage and search page.

A product rating and comment area was added to the product detail page. The purpose was to give users the ability to share information with other users about the usefulness of a product. Capturing comments and ratings could help new professionals in the home modification field have modification information from more seasoned professionals.

Usability Results – Phase III

The third and final phase collected data from nine participants remotely. These users did not travel to the usability lab in order to participate. They participated from their work or home offices. All but one of the users was from a state other than Georgia. CATEA was able to expand the potential recruitment by using a non-traditional process that prevented the researchers from seeing the face or computer activity of the participants. CATEA followed the actions of the user through the user stating what he was doing. For example, the user would say, "I'm clicking on the Solutions by Keyword. Now, I'm entering the word 'stairs'." As the user provided their actions, the facilitator and note taker would take the same actions.

As noted in the Methods Section of this report, the study tasks were revised. Tasks 2, examine the links to the public content, was revised to include the demonstrations of Solutions by Problem and Solutions by Keyword. Each user was asked to review one or both of the demonstrations. If only viewing one demonstration, users were given the latitude to select the one they wanted to see. The challenge with the demonstrations was in the amount of time it took to load. Several minutes were necessary to load and launch each demonstration. Once started, user found the demonstration understandable and helpful.

Task 5 was revised to not only enter a new client under "Add Client," but also to complete the specific problem section of the online assessment. The scenario provided to the user stated that the client had difficulty getting in and out of her house. The user was asked to review, respond to and enter as much data as they could in online assessment related to the activity of getting in and out of the house. Users found the online tool a bit cumbersome and questioned whether a typical user would enter all the information, particularly after collecting the measurements and information on paper while in the field. If users could easily access the database to enter the information in the field, they may be more likely to consider storing the assessment data in the database. Whether the data were entered in the field or in the office, users felt the assessment interface would need to improve their existing practices without requiring a great deal more time.

The product rating and comments area often was unnoticed by users. Once asked about the area, users thought that the information would be useful. One user felt that sharing product detail about who a particular product works best for and in what circumstances was essential. She felt that having product information without some of the specifics about application of the product was limiting. The comments and rating area could provide product limitations or "best practices" for installation.

DISCUSSION

Overall, users found the eCASPAR site to be needed in the field of home modification and to be thorough in its design and data. Consistently users were complimentary about the amount of product information available on the site. Some user also noted the ability to get architectural drawings of site-built ramps or drawings of other onsite modification as beneficial. It was clear to users that a great deal of product information was gathered and organized for the site.

Results from Phase 1 of the usability evaluation were fairly favorable. The comments were related to the clarity of the site features and the ease and reliability of getting accurate data. Through the Phase 1 results, areas for revision to improve the overall ease of use were clear. Results from the Phase II and III usability assessments confirmed that the changes did improve the overall function of the site, though problem areas remained. For example, additional changes to the By Keyword search were needed. Specifically there is a need to 1) clean up the product database to ensure description consistency and accurate spelling; 2) clean up and organize the data contained in the manufacturer listing; and 3) clean up and organize the product types/categories.

Of considerable importance to users is the MyAssessments. Unfortunately this online assessment area was not available for CATEA staff to test with users. To compensate, the staff prepared a sample area to provide guidance to EHLS in developing this tool. The CASPAR document, which is what the MyAssessment will be based on, is a very detailed assessment tool and was thought to be a bit cumbersome by users. Creating a highly functional online representation of this assessment tool may improve the perception. Providing the ability to skip sections of the assessment or have mostly optional data fields may help. Periodic focused usability evaluation of the MyAssessments tool while under development is recommended. The MyAssessments and MyClients were the most attractive areas of the site. Though users were impressed by the product information, many would not pay membership for simply access to current product information. The ability to store and track client information was of particular importance.

It is important to note that of the 19 respondents who answered the question regarding their willingness to pay for eCASPAR membership, 58% would pay between $100-499; 16% would pay $500-999, and 21% would not pay for membership. In follow-up studies with the completed site, it would be helpful to determine if users would be willing to pay more and what type of user would be best to target for membership. The search demonstrations were valuable enough to users to consider a full site demonstration video to market the site's capacity. Further investment in and evaluation of a well-designed demo is recommended.